Extended Paddle Card Specifications

Requirements:

1. Design should allow assembly and maintenance of the ADF to TAB cables and the BLS Pleated Foil cables without risk of damaging any ADF Crate backplane pins.

   Per ADF Crate this includes:

   20 of the 21 crate slots will use the paddle card
   40 pleated foil cables that carry BLS analog signals
   60 "LVDS 8 pair" cables that carry Channel Link signals to TABs
   1 "LVDS 8 pair" cable that carries the SCLD control and timing

2. Allow air flow to cool the ADF Crate power supply module.

3. Handle the Channel Link signals without causing distortion

   425 MHz basic signaling frequency
   200 psec typical edge speeds

   *We can not risk distortion of the Channel Link signals and thus close the eye pattern at the TAB receiver where it has the technically challenging problem of landing 30 of the Channel Link on a single card.

4. Handle the BLS analog signals without causing distortion or cross talk or noise at the 1 mV level.

5. Provide Support, dress, and strain relieve for all the cables that go into the back of the ADF Crate. These cables must exit to the sides and not cover the area behind the power supply module. If the power supply module needs to be changed, it comes out toward the back.